

WHAT IS CLAIMED IS:

1. A metal wiring board comprising a metal plate as a substrate, wherein:

the metal plate is processed in a predetermined wiring pattern;

the metal plate has a surface including a soldering area and a non-soldering area;

the soldering area is a conductive area prepared for electrical connection; and

the non-soldering area is an electrically isolated area coated with solder resist.

2. The metal wiring board according to claim 1, wherein the predetermined wiring pattern includes a wiring portion that functions as an electrical wire.

3. The metal wiring board according to claim 1, wherein the predetermined wiring pattern further includes a terminal portion for electrical connection with an external device.

4. The metal wiring board according to claim 1, wherein the processing of the metal plate is performed by stamping the metal plate.

5. The metal wiring board according to claim 1, wherein the solder resist coating on the non-soldering area is performed by solder resist printing.

6. The metal wiring board according to claim 1, wherein the wiring portions are held by a resin case at ends thereof.

7. The metal wiring board according to claim 1, wherein the soldering area is prepared for soldering of a surface mount device having leads with a small pitch.

8. The metal wiring board according to claim 8, wherein:
the metal plate includes a plurality of soldering areas;
and

the soldering areas are arranged so that a surface mount device bridges adjacent electrical wiring portions when soldered.

9. A method for manufacturing the metal wiring board claimed in claim 1, comprising:

defining the non-soldering area on the metal plate;
coating the surface of the metal plate with solder resist except for the non-soldering area; and
removing unnecessary portions of the metal plate to form the predetermined wiring pattern.

10. The method for manufacturing the metal wiring board according to claim 10, further comprising processing the metal plate to provide the terminal portion.

11. The method for manufacturing the metal wiring board

according to claim 10, wherein the coating step is performed by solder resist printing.

12. The method for manufacturing the metal wiring board according to claim 10, the removing step is performed by stamping.

13. The method for manufacturing the metal wiring board according to claim 11, wherein the terminal portion are connected together at ends thereof with a frame portion, further comprising:

holding the electrical wiring portions by a case; and
removing the frame portion.